

Development of a Goniometer with Nanoradian Accuracy

Basil Blank, Tom Kupp, Eric Johnson, Alex Deyhim,
Chi-Chang Kao*, Wolfgang Caliebe*

Advanced Design Consulting, Inc., 126 Ridge Road, PO Box 187, Lansing, NY 14882

Phone: (607) 533-3531; Fax: (607) 533-3618

E-mail: adc@adc9001.com; Web: www.adc9001.com

** Brookhaven National Laboratory (BNL)*

Abstract

Advanced Design Consulting, Inc. (ADC) designed a super accurate goniometer for applications where nanometer accuracy is required. The system is capable of achieving super accurate resolution, repeatability, orthogonality of motion, and stability at a wide range of load capacities.

This paper summarizes measurement data obtained from Brookhaven National Laboratory describing the precision, angular accuracy, and stability.

Keywords: goniometer, nanoprecision, stability

Presentation: Poster